

TRANSLATION**PATENT COOPERATION TREATY****PCT****INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 2084/PCT	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/CH2004/000014	International filing date (day/month/year) 14.01.2004	Priority date (day/month/year)
International Patent Classification (IPC) or national classification and IPC B22D11/06		
Applicant LAMEC AG		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

- a. ☒ (sent to the applicant and to the International Bureau) a total of 1 sheets, as follows:
- ☐ sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
- ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
- b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s))

_____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|---|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the report |
| <input type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> | Box No. VI | Certain documents cited |
| <input checked="" type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> | Box No. VIII | Certain observations on the international application |

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/CH2004/000014

Box No. I

Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language _____ which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-19 _____ as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☒ the claims:
- nos. 7-28 _____ as originally filed/furnished
- nos.* _____ as amended (together with any statement) under Article 19
- nos.* 1-6 _____ received by this Authority on 03.02.2006 with letter
- nos.* _____ received by this Authority on of 23.01.2006
- ☒ the drawings:
- sheets 1/11-11/11 _____ as originally filed/furnished
- sheets* _____ received by this Authority on _____
- sheets* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/CH2004/000014

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	<u>1-28</u>	YES
	Claims	<u></u>	NO
Inventive step (IS)	Claims	<u>1-28</u>	YES
	Claims	<u></u>	NO
Industrial applicability (IA)	Claims	<u>1-28</u>	YES
	Claims	<u></u>	NO

2. Citations and explanations (Rule 70.7)

1. This report makes reference to the following documents:

- D1: US-A-4 794 978 (LAUENER WILHELM F), 3 January 1989 (1989-01-03)
- D2: EP-A-0 798 060 (PROPERZI GIULIO), 1 October 1997 (1997-10-01)
- D3: DE 41 21 169 A (& EISENGIESSEREI MEUSELWITZ GM), 25 March 1993 (1993-03-25)
- D4: GB-A-1 388 378 (ALCAN RES & DEV), 26 March 1975 (1975-03-26)
- D5: US-A-5 645 122 (LUGINBUEHL ERICH ET AL), 8 July 1997 (1997-07-08)

2. Novelty and inventive step, PCT Article 6

Document D1 is regarded as the prior art closest to the process as per claim 1 and casting machine as per claim 4. In that casting machine, the blocks (15) can be retained on the carriers of the conveyor chain (9, 10) by magnets (35) (column 3, lines 41-55; figure 6). The magnets form part of the chain and thus move together with the chain.

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

By contrast, the magnets in the casting machine of the present application are *stationary*, and the blocks can be moved over them without contacting them. The process and the casting machine are thus novel (PCT Article 33(2)).

The process as per claim 1 and the casting machine as per claim 4 involve an inventive step (PCT Article 33(3)) because the contactless support makes it possible to exchange multiple blocks simultaneously (see page 14 of the description).

Although stationary magnets in casting machines are known from D2 and D4, in those documents a belt caster is guided and held. This does not suggest an utilisation in blocks of a casting machine with a caterpillar chain drive. D3 and D5, which describe alternative fastening possibilities, also fail to suggest the use of stationary magnets.

Nor do the citations to describe or suggest the process for exchanging the blocks (claim 28) of the casting machine that should be considered novel and inventive.

Dependent claims 5-27 also meet the PCT novelty and inventive step requirements.

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

1. Clarity

The application does not meet the requirements of PCT Article 6 because claim 4 is unclear.

Claim 4 does not contain a complete sentence [German text only] because the subordinate clause, "characterised in that the continuous production of bars and strips from metallic and non-metallic materials, in a casting mould..." does not contain a verb ("is carried out", for example).

Moreover, the cited passage unnecessarily repeats what has already been stated by reference to the process.

The wording, "at least one wall of the casting mould comprising blocks", would be more appropriate.

2. Two-part form

Although claims 1 and 4 are drafted in the two-part form, the feature that the casting mould is formed by blocks which circulate like crawlers about a casting caterpillar chain are incorrectly included in the characterising part, since they have been disclosed in document D1 in connection with the features mentioned in the preamble (PCT Rule 6.3(b)).